



DIVISION OF  
CORPORATION FINANCE

UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
WASHINGTON, D.C. 20549

September 13, 2012

Via E-mail

Clive A. Meanwell  
Chairman and Chief Executive Officer  
The Medicines Company  
8 Sylvan Way  
Parsippany, NJ 07054

**Re: The Medicines Company  
Form 10-K for the Fiscal Year Ended December 31, 2011  
Filed February 29, 2012 and Amended on June 5, 2012  
Form 10-Q for the Quarterly Period Ended June 30, 2012  
Filed August 9, 2012  
Form 8-K Dated July 25, 2012  
Filed July 25, 2012  
File No. 000-31191**

Dear Mr. Meanwell:

We have limited our review of your filings to only your financial statements and related disclosures and do not intend to expand our review to other portions of your documents. In our comments, we ask you to provide us with information so we may better understand your disclosure.

Please respond to this letter within 10 business days by providing the requested information or by advising us when you will provide the requested response. If you do not believe a comment applies to your facts and circumstances, please tell us why in your response. Please furnish us a letter on EDGAR under the form type label CORRESP that keys your responses to our comments.

After reviewing the information provided, we may raise additional comments and/or request that you amend your filings.

Form 10-K/A for the Year Ended December 31, 2011  
Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations  
Liquidity and Capital Resources  
Contractual Obligations, page 27

1. Please provide us proposed disclosure to be included in future periodic reports that includes in the discussion below the table the aggregate milestone payments that you may be required to pay under all your material agreements. For example, you state on page F-33 that upon

achievement of certain milestones you are obligated to pay Pfizer up to an aggregate of \$410 million in milestone payments.

Form 10-Q for six months ended June 30, 2012

10. Convertible Senior Notes, page 14

2. You issued convertible debt in the six months ended June 30, 2012. Section 14 of Exhibit 4.1 in the 8-K filed on June 14, 2012 states that the conversion rate may change based on different events. Please tell us why the convertible feature is not recorded as a derivative pursuant to ASC 815-15 and 815-40. In particular, please provide us your analysis of the provision in Section 14.04(e) as to whether or not the provision precludes the option from being indexed to its own stock. If you believe the provision allows the option to be indexed to its own stock, please provide an analysis as to whether or not the option should be classified in stockholders' equity, citing each criterion in ASC 815-40-25.
3. You issued note hedges that have been recorded as a reduction to additional paid in capital. You state that the note hedges are expected generally to reduce the potential dilution with respect to shares of the Company's common stock upon any conversion of the notes in the event that the market price per share of the Company's common stock, as measured under the terms of the note hedges, at the time of exercise is greater than the strike price of the note hedges. Please provide us your analysis demonstrating that the note hedges are effective and qualify for hedge accounting pursuant to ASC 815-20-25-72 and thus are not required to be recorded as a derivative.
4. You also issued warrants that you have recorded as additional paid in capital. You state that the warrants are indexed to the Company's common stock and are recorded in equity in the Company's consolidated balance sheets and the warrants are exempt from the scope and fair value provisions of accounting principles related to accounting for derivative instruments. You also state that the warrants are subject to customary anti-dilution adjustments. Please tell us the nature of the anti-dilution adjustments and why you do not believe any of the anti-dilution adjustments are considered ratchets that would require derivative treatment. Refer to ASC 815-40.

Form 8-K Filed July 25, 2012

Exhibit 99.1

Reconciliation of GAAP to non-GAAP Measures, page 7

5. In this exhibit you present a full statement of income to reconcile your GAAP earnings to non-GAAP earnings. Please represent to us that you will no longer present these tables in future Item 2.02 Form 8-K submissions or elsewhere. Please see Question 102.10 of our Compliance & Disclosure Interpretations for Non-GAAP Financial Measures. Please also see Instruction 2 to Item 2.02 of Form 8-K which indicates that the provisions of Item 10(e)(1)(i) apply to these public disclosures.

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filings to be certain that the filings includes the information the Securities Exchange Act of 1934 and all applicable Exchange Act rules require. Since the company and its management are in possession of all facts relating to a company's disclosure, they are responsible for the accuracy and adequacy of the disclosures they have made.

In responding to our comments, please provide a written statement from the company acknowledging that:

- the company is responsible for the adequacy and accuracy of the disclosure in the filings;
- staff comments or changes to disclosure in response to staff comments do not foreclose the Commission from taking any action with respect to the filings; and
- the company may not assert staff comment as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

You may contact Tabatha Akins, Staff Accountant, at (202) 551-3658 or Mary Mast, Senior Accountant, at (202) 551-3613 if you have any questions regarding the comments. In this regard, do not hesitate to contact me at (202) 551-3679.

Sincerely,

/s/ Jim B. Rosenberg

Jim B. Rosenberg  
Senior Assistant Chief Accountant